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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/099,876	03/15/2002	Norbert Brill	6655	5393

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EXAMINER

VERSTEEG, STEVEN H

ART UNIT PAPER NUMBER

1753

DATE MAILED: 11/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/099,876	Applicant(s) BRILL ET AL.	
	Examiner Steven H VerSteeg	Art Unit 1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14 is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: "is" should be "of" on page 2 at line 11; and it is unclear what "NE" means on page 5 at line 7.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 15-19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,081,710 to Heywood et al. (Heywood).
4. For claim 15, Applicant requires an electrode comprising a superalloy having a cobalt content greater than 8%. For claim 16, Applicant requires cobalt and nickel of at least 12 weight %. For claim 17 Applicant requires tungsten of 0.1-15 weight %. For claim 18, Applicant requires titanium in an amount of 0.1-5% by weight.
5. Heywood discloses an electrode comprising superalloy (col. 2, l. 7-16), 40 weight % cobalt, 25 weight% nickel, and 2 weight percent titanium (col. 3, l. 12-30). Heywood also discloses an electrode comprising superalloy (col. 2, l. 7-16), 10 weight percent cobalt and 12 weight percent tungsten (col. 2, l. 37-42).

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6. For claim 19, Applicant requires an electrode comprising superalloy having a nickel content of greater than 8% by weight. For claim 21, Applicant requires a titanium content of 0.1-5% by weight.
7. Heywood discloses an electrode comprising superalloy (col. 2, l. 7-16), nickel in an amount of 25 weight percent, and 2 weight percent titanium (col. 3, l. 12-30).
8. Claims 22-25 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,844,747 to Jachowski et al. (Jachowski).
9. For claim 22, Applicant requires an electrode comprising a thermal-worked steel having a vanadium content of greater than 0.05 weight percent and a chromium content of greater than 1 weight percent. For claim 23, Applicant requires the vanadium content to be 0.07-3.5 percent by weight. For claim 24, Applicant requires the chromium content to be 1-15 percent by weight. For claim 25, Applicant requires tungsten in an amount of 1-10 percent by weight.
10. Jachowski discloses an electrode comprising steel, 3.8 weight percent chromium, 1.7 weight percent vanadium, and 6 weight percent tungsten (claim 4).
11. Claims 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6,200,440 B1 to Moran et al. (Moran).
12. For claim 26, Applicant requires an electrode comprising stainless steel with a chromium content of greater than 12.5 weight percent. For claim 27, Applicant requires the chromium content to be less than 30 weight percent. For claim 28, Applicant requires nickel in an amount of 2-25 weight percent.
13. Moran discloses an electrode comprising stainless steel, 15 weight percent chromium, and 20 weight percent nickel (claim 5).

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Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,081,710 to Heywood et al. (Heywood).

16. For claim 20, Applicant requires tungsten in an amount of 0.1-15% by weight. Heywood discloses 40 weight percent nickel and anywhere from a trace amount to 20 weight percent tungsten (col. 2, l. 52-68). Thus, Heywood does not explicitly disclose 0.1-15 weight percent tungsten, but rather, discloses a range that encompasses the range claimed by Applicant.

Heywood also discloses, in a separate electrode, the use of tungsten in a weight percentage claimed by Applicant, 12 weight percent (col. 2, l. 37-42). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Heywood to use tungsten in an amount of 12 weight percent for the electrode containing 40 weight percent nickel because Heywood discloses a range that encompasses 12 weight percent and 12 weight percent is specifically exemplified as a good weight percentage for other similar electrodes in Heywood.

Response to Amendment

17. The 112-second paragraph rejection of claims 9 and 10 presented in the office action mailed March 30, 2004 is withdrawn in light of the amendment.

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18. The objection to the specification presented in the office action mailed March 30, 2004 stands.
19. The 102(b) rejection of claims 15-19 and 21 over Heywood presented in the office action mailed March 30, 2004 stands.
20. The 102(b) rejection of claims 22-25 over Jachowski presented in the office action mailed March 30, 2004 stands.
21. The 102(b) rejection of claims 26-28 over Moran presented in the office action mailed March 30, 2004 stands.
22. The 103(a) rejection of claim 20 over Heywood presented in the office action mailed March 30, 2004 stands.
23. The 103(a) rejection of claims 1-7 over Heywood in view of DE 3519163 (DE '163) presented in the office action mailed March 30, 2004 is withdrawn.
24. The 103(a) rejection of claims 8-11 over Jachowski in view of DE '163 presented in the office action mailed March 30, 2004 is withdrawn.
25. The 103(a) rejection of claims 12-14 over Moran in view of DE '163 presented in the office action mailed March 30, 2004 is withdrawn.
26. The claim objection of claims 4 and 18 presented in the office action mailed March 30, 2004 is withdrawn.

Allowable Subject Matter

27. Claims 1-14 are allowed.
28. The following is a statement of reasons for the indication of allowable subject matter: it is neither anticipated nor obvious over the prior art of record to have a device for producing

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electrical discharges in an aqueous medium as claimed by Applicant in claims 1, 5, 8, and 12.

The intended use limitation in the preamble, “for producing electrical discharges in an aqueous medium” breathes life into the claim because the claim limitations refer back to the intended use.

29. Modifying any of Heywood, Jachowski, or Moran with DE ‘163 would not be obvious because DE ‘163 is directed to medical purposes, which is a completely different field than Heywood, Jachowski, and Moran. There would be no reason to use a medical purpose invention in a jet fuel igniter or an electrolytic cell or a roll for a rolling mill. The technologies are different and not obviously combinable.

Response to Arguments

30. Applicant's arguments filed September 30, 2004 have been fully considered but they are not persuasive.

31. Applicant has argued that Heywood, Jachowski, and Moran do not disclose an aqueous medium as required by claims 15-19, and 22-28. I disagree about the content of your claims. The statement that the electrode is “for use in a device that produces electrical discharges in an aqueous medium” is an intended use and does not receive patentable weight. The only patentable limitations in the claims are “An electrode” and “said electrode comprising...” The intended use does not have patentable weight. Therefore, it does not matter if Heywood, Jachowski, and Moran do or do not have an aqueous medium. They each have the claimed electrode and that is all that is required. The intended use does not breathe life into the claim.

32. Applicant has also indicated that I may make an examiner's amendment to correct the specification. The instant application is not allowable. Please correct the specification yourself. A proper response to the final office action will require you to fix it, not me. If I fix it and it is

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more than 3 months from the mailing of this office action, you might have to pay an extension of time.

General Information

For general status inquiries on applications not having received a first action on the merits, please contact the Technology Center 1700 receptionist at (571) 272-1700.

For inquiries involving Recovery of lost papers & cases, sending out missing papers, resetting shortened statutory periods, or for restarting the shortened statutory period for response, please contact Denis Boyd at (571) 272-0992.

For general inquiries such as fees, hours of operation, and employee location, please contact the Technology Center 1700 receptionist at (571) 272-1300.

Conclusion

33. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven H VerSteeg whose telephone number is (571) 272-1348. The examiner can normally be reached on Mon - Thurs (6:30 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven H VerSteeg
Primary Examiner
Art Unit 1753

shv
November 4, 2004